## UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

and

## MISSISSIPPI AGRICULTURAL AND FORESTRY EXPERIMENT STATION MISSISSIPPI STATE UNIVERSITY

RELE SE OF 'QUAIL HAVEN' RESEEDING SOYBEAN

The Soil Conservation Service, United States Department of Agriculture and the Mississippi Agricultural and Forestry and Experiment Station, Mississippi State University announce the release of 'Quai1 Haven' reseeding soybean (Glycine soja Sieb. and Zucc.). It was selected by the Soil Conservation Service Plant Materials Center at Coffeeville, Mississippi, for wildlife use.

Quail Haven is an increase from seed provided by Karl Graetz of Raleigh, North Carolina. The original seed came from China in 1948 and was designated PI-163453 and MS-128.

Quail Haven is a vining, annual legume. Leaves, stems, and fruits are covered with short, tawny hairs. The trifoliate leaves have ovate to ovate lanceolate, acute to acuminate leaflets approximately 10 cm. long. Usually Four to eight small, purple to lilac flowers are in racemes in the axils of leaves. Pods are about 2.5 cm. long and usually contain two to four oval seeds ranging from olive to black. About 1/4 of the seeds are solid black, 1/4 olive, and 1/2 mottled.

Quail Haven has been compared extensively against 'Bobwhite' and other varieties of soybean and cowpea that are grown for wildlife. It was rated superior to Bobwhite because seed production was greater and more timely. had more hard seeds and was a better reseeder than the others.

The principal use for Quail Haven will be for wildlife food and cover. has been used for hay and as a cover crop for soil improvement. It is adapted to the Coastal Plain. Because it matures fruit in late October and November, early killing frost is the limiting factor for seed production. It grows best on soils that are suited to commercial soybeans and does not tolerate extremely sandy or wet soils. Because of its twining habit, it can withstand weed competition. Corn is used as a support at the Coffeeville Plant Materials Center to make harvesting easier. Because of shattering, combines usually harvest 250-300 pounds/acre of a total production of about 1200 pounds.

Breeder seed will be maintained by the Coffeeville Plant Materials Center. Foundation seed for Certified growers will be available through Foundation Seed Stock, MAFES, P. O. Box 5267, Mississippi State University, Mississippi State, Mississippi 39762. Both Breeder and Foundation seed will be available in the spring of 1986.

Director, Mississippi Agricultural and Forestry Experiment Atation

State Conservationist

Mississippi Soil Conservation Service

1/16/86 1/22/80

Deputy Chief for Technology Soil-Conservation Service, Washington, DC 2/10/86 Date

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Documentation of a Plant Accession Selected for Advanced Testing

Species: Glycine soja Sieb and Zucc.

syn. Glycine ussuriensis Rengel & Maack

Common Name: Wild reseeding soybean

Plant Symbol: GLUSX

Accession

Number(s): PI-163453, SC57-37, MS-128, MS-26, MS-28, F-716

Origin: Seed were given to the USDA-FPI 4-8-48 by Chen Ling Ting, National

Chekiang University Eangchow, Chekiang. Seed were received by the Soil Conservation Service from Dr. E. E. Hartwig, Delta Experiment Station, Stoneville, Mississippi, in 1954. First tested by the Service at the Americus Plant Materials Center. The first large increases were made by the North Carolina Wildlife Resources

Commission Nursery at Chapel Hill, North Carolina.

Method of Increase of original seed after comparing it with other similar

Selection: accessions and with commercial and naturalized soybeans.

Description: The wild reseeding soybean is a vigorous, viny, annual legume pro-

ducing a large amount of green material which has good forage possibilities. Seed yields are 1200 to 1600 pounds per acre, but since the pods shatter badly, combine yields run about 250-300 pounds per acre. The seed are shiny to drab black or olive green, and mature in mid to late October. They are hard coated and do not rot on the ground over winter. Thus, the plant volunteers

dependably each year.

Anticipated Use in primarily a reseeding legume valuable for wildlife, chiefly Conserva- upland game birds like turky and bobwhite. It has potential as

upland game birds like turky and bobwhite. It has potential as a summer cover crop or as an interplanted crop in corn. It can

be used as hay.

Potential North Carolina to Arkansas, south to North Florida and Louisiana.

Area of Due to late seed maturity, the plant is not adapted to the Adaptation: mountains, the Tennessee Plateau or the Ozark Highlands in the

Southeastern States.

Potential This variety prefers a moderately fertile soil and will not

prosper on deep sands or severely eroded sites.

Adaptation:

Where Seed Coffeeville, PMC.

Will Be Maintained:

Soil

tion use:

Prepared By: Coffeeville PMC, 1980.

## BOTANICAL DESCRIPTION OF MS-128 RESEEDING SOYBEAN (PI-163453)

Glycine soja Sieb. and Zucc.

Syn. Glycine ussuriensis Rengel & Maack.

Twining annual stem branching, slender, 1-4 mm. in diameter, were or less retrorsely strigose or hirsute with usually tawny hairs about 1 mm, long; leaves trifoliate, petioles sulcate and retrorse-strigose, rachis 1-2 cm. long, stipules narrow and densely hirsute about 1 mm. long; leaflets ovate to ovate lanceolate 4-15 cm. long, 1-8 cm. wide, lateral leaflets slightly smaller and more or less asymetrical, margins entire, tips acute to acuminate, tapering to rounded at the base, usually dense strigose, especially on the margins and veins on the lower surface, stipels subulate to sctaceous about 1 mm. long; bracts deltoid about 2 mm. long; inflorescences axillary, with usually 4-8 flowers in racemes but sometimes flowers occur singly or in pairs, hirsute pedicels 0.5-8 mm. long; flowers lilac to purple about 5 mm. long, calyx strigose or hirsute about 2-3 mm long with teeth about as long as the tube; legume linear-oblong, subfalcate, 25-35 mm. long, 5-8 mm. wide, tawny strigose or hirsute with hairs about 1.5 mm. long, turning dark brown at maturity; seed 2-4 in a pod, usually 3, oval to short oblong, dull to shiny in colors ranging from olive to black, often mottled, in approximately the ratio of 1 olive : 2 mottled : 1 black.

Flowers September-October; Ripens October-Novemeber.

Bobwhite soybean (Glycine hybrid) is similar but flowers August-September; ripens September. Leaves of Bobwhite are generally obtuse. Seeds are not as long and are over **50** percent of the lighter color.

Commercial soybean is bushy and has seed that are round and yellow.